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Page: 3 of 15

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims

1. (Currently Amended) An apparatus for use with an ion thrusting system, the apparatus comprising: an ionization membrane having at least one area through which a gas is passed, and which ionizes the gas molecules passing therethrough to form ions and electrons; and an accelerator element which accelerates

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~~----- the ions to form thrust, wherein said ionization membrane -----~~  
comprises: an insulating element having at least one opening, a first conductive electrode extending on a first surface of said insulating element at the at least one opening and a second conductive electrode extending on a second surface of the insulating element at the at least one opening, wherein said insulating element separates said first and second conductive electrodes at said at least one opening by a thickness less than the mean free path of the molecules within the gas being ionized.